

# RANGE EXTENSIONS AND DISTRIBUTION RECORDS FOR SOME BUTTERFLIES IN NORTH-EASTERN QUEENSLAND - PART IV

M. F. BRABY

CSIRO Division of Entomology, GPO Box 1700, Canberra, ACT, 2601

## Abstract

New distribution records and range extensions in north-eastern Queensland are given for *Netrocoryne repanda* C. & R. Felder, *Trapezites symmomus* Hübner, *Hesperilla ornata* (Leach), *Acrodipsas brisbanensis* (Miskin), *Hypochrysops delicia* Hewitson, *Ogyris genoveva* Hewitson, *Hypolycaena danis* C. & R. Felder and *Ionolyce helicon* (Felder). Comments on subspecific status are made for some taxa.

## Introduction

Recent collecting in Queensland, particularly the Eungella area west of Mackay, has produced the following new records which concludes a series of papers dealing with butterfly distributions in north-eastern Queensland (Braby and Dunn 1991, Braby 1992, 1994). The records provide localities of distributional interest and extensions to the known ranges of eight butterfly species in the families HesperIIDae and LycaenIDae. Of particular interest is the first reliable record of *Ogyris genoveva* from north-eastern Queensland. Nomenclature follows Common and Waterhouse (1981).

## HESPERIIDAE

### *Netrocoryne repanda* C. & R. Felder

One female was captured in upland rainforest in the Bluewater State Forest, approximately 35 km W of Bluewater near Townsville, on 30.xi.1992. Two fresh males were also netted hilltopping in open-forest on the summit of St. Johns Peak (920 m), about 14 km S of Eungella on 13.iii.1994. The female has the terminal and subterminal region of both wings fairly dark, especially on the underside of the hindwing, and the yellow streak between the cell spot and costa on the forewing extends proximally beyond the cell spot, although the streak is not longer than the cell spot, unlike *N. r. expansa* Waterhouse females. The two males are dark brown on the upperside and underside but they lack the pale yellow streak between the cell spot and costa, a feature which differentiates *N. r. expansa* males (Common and Waterhouse 1981). Examination of specimens in the ANIC indicated that the difference between the two recognised subspecies is very minor, especially among females. Dunn and Dunn (1991) also showed that the distribution limits of these two subspecies were difficult to define: *N. r. expansa* reaches its southern limit at Mission Beach (Wilson 1984), while *N. r. repanda* appears to reach its northern limit at Airlie Beach with a possible record from Townsville. The specimen from the Bluewater Range confirms the existence of the species near Townsville and provides a new intervening locality. Further material is needed between Mission Beach and the Mackay-Eungella area to clarify the status of the two currently recognised subspecies.

*Trapezites symmomus* Hübner

Three males were collected along the edge of upland rainforest on the Broken River about 5 km SSW of Eungella on 15.ix.1993 and 10.iii.1994. They have the postmedian spots on the underside of the hindwing as a narrow continuous band, rather than as small dark discrete spots typical of *T. s. sombra* Waterhouse from the wet tropics of northern Queensland. Valentine (1988) noted the presence of *T. symmomus* in the Eungella area and suggested the population was closer to *T. s. sombra*. The above males, however, show a closer affinity to *T. s. symmomus* from central and southern Queensland, although it is possible that the Eungella population forms part of a cline between these two subspecies.

*Hesperilla ornata* (Leach)

Five pupae and several late instar larvae were collected from tussocks of *Gahnia aspera* growing in the relatively moist and deeply dissected sandstone gorges of the White Mountains National Park (20°28'S, 144°54'E) north of Torrens Creek, about 240 km inland from Townsville, on 5.ix.1994. Adults reared from this stock (4 males, 3 females) more closely resemble *H. o. ornata* than the northern *H. o. monotherma* (Lower). However, the pupal cap is distinctive, with the two long curved anterior projections fused to form a large circular disc. *H. o. ornata* reaches its northern limit on the coast at Airlie Beach (Dunn and Dunn 1991) about 400 km E of Torrens Creek, while *H. o. monotherma* reaches its southern limit in the rainforest belt at Paluma north-west of Townsville (Common and Waterhouse 1981). The pupal stage of these specimens varied from 19 to 22 days.

## LYCAENIDAE

*Acrodipsas brisbanensis* (Miskin)

Four males were collected on the summit of St. Johns Peak (920 m), about 14 km S of Eungella (21°16'S, 148°28'E), on 11.iii.1994. This species was only recently discovered in north-eastern Queensland (Valentine and Johnson 1982, Lane 1985), however, there are no records of the species, or indeed the genus, between the dry eucalypt open-forests west of Paluma (the southern most point of the species range in north-eastern Queensland) and the Blackdown Tableland, approximately 600 km further south in central Queensland (Dunn and Dunn 1991). The presence of the species west of Mackay substantially bridges the disjunction in range of *Acrodipsas* between these two areas.

*Hypochrysops delicia* Hewitson

A male was collected on the summit of St. Johns Peak (920 m), about 14 km S of Eungella, on 11.iii.1994. The specimen was taken at 1430 h during overcast conditions as it settled on a leaf about 5 m from the ground. The upperside has the black margins relatively narrow and the blue area is rather extensive, similar to *H. d. duaringae* (Waterhouse). The locality

provides an important intermediate distribution record in north-eastern Queensland, bridging the 800 km disjunction in range between the Mt Garnet area west of the Atherton Tableland and the Blackdown Tableland, Westwood-Duaringa district in central Queensland (Common and Waterhouse 1981, Dunn and Dunn 1991, Lane 1995).

*Ogyris genoveva* Hewitson

A number of males were observed hilltopping between 1430-1600 hrs on the summit of St. Johns Peak (920 m), about 14 km S of Eungella, in dry eucalypt open-forest on 11 and 13.iii.1994. Their flight was extremely fast and occasionally they settled high up on dead eucalypt branches. One male, in slightly worn condition, was captured. No *O. zosine* Hewitson were in evidence at this locality. The specimen has the black termen of the forewing relatively narrow, has a wingspan of 50 mm and the upperside is dull purple. It is darker than specimens from central Queensland (assigned to *O. g. duaringa* Bethune-Baker) and coastal southern Queensland (assigned to *O. g. genoveva*) and cannot be placed to subspecies. Common and Waterhouse (1981) pointed out that the status of the recognised subspecies are doubtful. *O. genoveva* has been recorded previously as far north as Duaringa (Common and Waterhouse 1981, Dunn and Dunn 1991), however Common and Waterhouse (1981) mentioned two males, in the Australian Museum, from Kuranda and Little Mulgrave River (near Gordonvale), northern Queensland, which they assigned to *O. g. genoveva*. These specimens are labelled 'Kuranda, Qld, Mar. 1902, G.A. Waterhouse coll.' and 'Little Mulgrave River, Dec. 1905, F.H. Brown' respectively. The register in the Australian Museum indicates that the first specimen originated from the Goldfinch collection; however, there is uncertainty as to where the specimen actually came from and who collected it. It could not have reached Waterhouse from F.P. Dodd as he did not live at Kuranda at that time (Monteith 1991). The second specimen bears an additional label 'passed through C. Wyatt Theft coll.'; hence the label data is unreliable since Wyatt removed labels from the specimens he stole. Moreover, these historic localities have not been confirmed by subsequent collectors and the species has not been collected in the seemingly suitable habitat of the dry upland eucalypt open-forests west of the Atherton Tableland (D. Lane, J. Young and G. Wood, pers. comm.). In view of these findings *O. genoveva* is best excluded from far northern Queensland until proven otherwise. The high altitude locality west of Mackay, which lies about 300 km NNW of Duaringa, should now be regarded as the established northern limit of *O. genoveva* in Queensland.

*Hypolycaena danis* C. & R. Felder

One adult was captured in upland rainforest in the Bluewater State Forest, approximately 35 km W of Bluewater near Townsville, by J.M. Billington on 30.xi.1992. This species has been recorded only recently from the urban areas of Townsville (Smythe 1993, Valentine 1993, Braby 1994) but

hitherto has not been recorded in the ranges between Townsville and Ingham.

*Ionolyce helicon* (Felder)

A single male was captured near the Broken River, about 5 km SSW of Eungella, in upland rainforest (above 700 m) on 12.iii.1994. On the mainland, the species ranges from Cape York to Ollera Creek 10 km NW of Rollingstone, with an isolated record about 650 km further south at Mt. Etna near Rockhampton (Common and Waterhouse 1981, Dunn and Dunn 1991). The species frequents rainforest habitats, appears to be local and, at times, can be numerous (Valentine and Johnson 1992). The Eungella locality provides an intervening distribution record between Rockhampton and Rollingstone.

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